Attorney Docket No.: LUC 2-026-3

CLEAN SET OF AMENDED CLAIMS SERIAL NO. 09/836,685

Method for treating optical signals from a source thereof, which comprises the steps of:

- (a) providing a movable diffractive optical element (MDOE) having a surface carrying a holographic diffraction grating including an array of facets, each of said facets carrying a diffraction grating(s) which are superimposed, each being angularly offset with respect to each other;
 - (b) directing a source of input optical signal(s), each of said input signal(s) being associated with a given wavelength, onto said MDOE to generate output signal(s);
 - (c) supplying one or more output station(s); and
 - (d) moving said MDOE to distribute said output optical signal(s) among said output station(s).

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The method of claim 1, wherein said MDOE is provided as a magnet having said holographic diffraction grating attached thereto, and being magnetically coupled to a coil energizable for movement of said magnet and said diffraction grating.

- 17. A system for treating optical signals from a source thereof, which comprises:
 - (a) a source carrying input optical signal(s), each of said signal(s) being associated with a particular wavelength;
 - (b) a movable diffractive optical element (MDOE) having a surface carrying a holographic diffraction grating including an array of facets, each of said facets carrying a diffraction grating(s) which are superimposed, each being angularly offset with respect to each other, said MDOE being positioned to intercept said input optical signal(s) for generating and distributing output optical signal(s) and;
 - (c) output station(s) positioned to receive said output optical signal(s) from said MDOE.

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In a method for treating optical signals wherein optical signals provided by fiber optic cable(s) or laser diode(s) as input optical signals are distributed among output stations as output optical signals, each of said output stations comprising optical connector(s) positioned to receive said output optical signals, said optical connectors being selectively combinable to permit any combination of said output optical signals, the improvement which comprises the steps of:

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Subout Subout Subout

(b)

(c)

(a) providing a movable diffractive optical element (MDOE) having a surface carrying a holographic diffraction grating including an array of facets, each of said facets carrying a diffraction grating(s) which are superimposed, each being angularly offset with respect to each other;

directing said source of input optical signals onto said MDOE to generate output signals, each of said input signals being associated with a given wavelength; and moving said MDOE to distribute said output optical signals among said output stations.